

IRVOTEX

# JINGPIN NIGHT VISION

LEADING A NEW ERA OF PERCEPTION



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PRODUCT BROCHURE





## COMPANY PROFILE

Chengdu Jingpin Night Vision Optoelectronics Technology Co., Ltd. (IRVOTEX), a subsidiary of Vital Optics Technology Co., Ltd. (Stock Code: SZ 300489), specializes in pioneering infrared thermal imaging technology. We offer a wide array of products, from infrared cores and thermal imaging modules to night vision and visual perception devices, catering to a global clientele alongside tailored solutions. Leveraging cutting-edge proprietary technology and a commitment to customer satisfaction, IRVOTEX represents the forefront of industry innovation. We are devoted to enhancing human sensory experiences and shaping a new era in the world of perception.

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# OUTDOORS

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For outdoor activities like adventure, rescue, and animal observation—where environments are harsh and lighting poor—a high-performance thermal imager proves invaluable. Jingpin Night Vision's outdoor thermal imager features a high-resolution infrared detector for sharp, detailed thermal images; a fast, precise focusing system to capture every key moment; a wide-field lens for broader viewing; and a high-performance lithium battery with portable charging to eliminate power concerns during exploration. Its rugged, IP67 waterproof/dustproof design ensures stable operation in extreme weather.



# THERMAL MONOCULAR

## MK SERIES



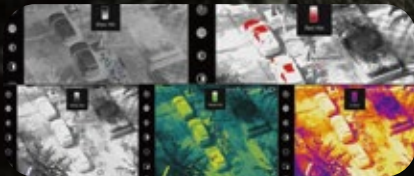
Shutterless



Real-time Denoising



Laser Ranging 1200m



5 Kinds of Palettes



Hot Track



IP67

SERIES	MK-IR		MK-IRS		MK-LR	
Model	MK-IR-E19 MK-IR-E25 MK-IR-E35 MK-IR-E50	MK-IR-Q25 MK-IR-Q35 MK-IR-Q50	MK-IRS-E19 MK-IRS-E25 MK-IRS-E35 MK-IRS-E50	MK-IRS-Q25 MK-IRS-Q35 MK-IRS-Q50	MK-LR-E19 MK-LR-E25 MK-LR-E35 MK-LR-E50	MK-LR-Q25 MK-LR-Q35 MK-LR-Q50
Detector	Uncooled VOx Microbolometer					
Resolution/Pixel Pitch	384x288/12μm	640x512/12μm	384x288/12μm	640x512/12μm	384x288/12μm	640x512/12μm
Objective Lens (F1.0)	19/25/35/50mm	25/35/50mm	19/25/35/50mm	25/35/50mm	19/25/35/50mm	25/35/50mm
Field of View	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3°×4.0°	17.6°×14.1° / 12.6°×10.1° 8.8°×7.0°	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3°×4.0°	17.6°×14.1° / 12.6°×10.1° 8.8°×7.0°	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3°×4.0°	17.6°×14.1° / 12.6°×10.1° 8.8°×7.0°
Visual Magnification	2.09~8.37 / 2.75~11.01 3.85~15.41 / 4.82~19.26	1.61~6.45 / 2.26~9.03 2.82~11.29	2.09~8.37 / 2.75~11.01 3.85~15.41 / 4.82~19.26	1.61~6.45 / 2.26~9.03 2.82~11.29	2.09~8.37 / 2.75~11.01 3.85~15.41 / 4.82~19.26	1.61~6.45 / 2.26~9.03 2.82~11.29
Laser Indicator (IRS)	/		650nm   Class II   Range >100m		/	
Spectral Band	8~14μm					
Eyepiece Diopter	-5~+5					
Eye Relief	20mm					
NETD	≤ 25mk@300K					
Display	0.39" OLED 1024x768					
Digital Zoom	1x、2x、4x					
Frame Rate.Hz	50Hz					
Protection Rating	IP67					
Measuring Distance	/				1200m	
Power Source	One 18650 Li-ion Battery					
Operating Time	≥ 5h					
Interface	Type-C (Support External Power Supply)					
Weight (Without Battery)	≤ 470g				≤ 515g	
Dimensions	196×70×58mm				196×70×90mm	
Operating Temperature	-20℃ ~+50℃					
Detection Range (Human)	19mm/1800m 25mm/2370m 35mm/3310m 50mm/4730m					
Detection Range (Hog)	19mm/1590m 25mm/2090m 35mm/2920m 50mm/4730m					

# THERMAL MONOCULAR

## SMART SERIES



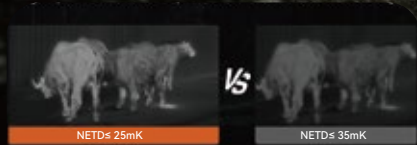
Small Size and Weight ≤260g



Working Time up to 6h



WiFi Transmission



NETD≤ 25mk



Hot Track



IP67

SERIES	SMART				
Model	S-IR-E10	S-IR-E19	S-IR-E25	S-IR-Q19	S-IR-Q25
Detector	Uncooled VOx Microbolometer				
Resolution, pixels	384×288/12μm			640×512/12μm	
Objective Lens (F1.0)	9.7mm	19mm	25mm	19mm	25mm
Field of View	26.7° ×20.2°	13.8° ×10.4°	10.5° ×7.9°	22.9° ×18.4°	17.5° ×14.0°
Visual Magnification	1~4	1.8~7.2	2.4~9.6	1.1~4.4	1.5~5.8
Laser Indicator (IRS)	650nm   Class II   Range >100m				
Spectral Band	8~14μm				
Eyepiece Diopter	-5~+5				
Eye Relief	23mm				
NETD	≤ 25mk@300K				
Display	0.39"OLED 1024x768				
Digital Zoom	1x、 2x、 4x				
Frame Rate.Hz	25Hz	50Hz	50Hz	50Hz	50Hz
Protection Rating	IP67				
Power Source	one 18650 battery (built in)				
Operating Time	≥ 7h	≥ 6h	≥ 6h	≥ 6h	≥ 6h
Interface	Type-C				
Weight (Including batteries)	≤ 251g			≤ 260g	
Dimensions	≤ 170×60×59mm				
Operating Temperature	-20℃ ~+55℃				
Detection Range (Human)	450m	900m	1200m	900m	1200m
Detection Range (Hog)	400m	800m	1000m	800m	1000m



# THERMAL BINOCULAR

## NE SERIES



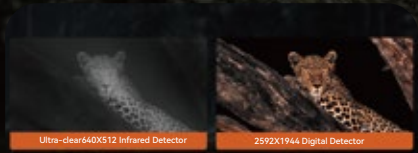
Shutterless



Real-time Denoising



Laser Ranging 5000m



640×512 (Infrared) +2592×1944 (Visible Light)



Hot Track



IP67

SERIES	NE-Q55	
Specification	Infrared	Visible Light
Resolution/Pixel Pitch	640×512 /12μm	2592×1944/2.0μm
Objective Lens	55mm F1.0	25mm F1.8
Field of View	7.94° ×6.37°	11.8° ×8.9°
Frame Rate	50Hz	30Hz
Identification Range (Human)	650m	900m
Recognition Range (Human)	1300m	1800m
Detection Range(Human)	5200m	7100m
Visual Magnification	3.66	2.5
Fusion Visual Magnification	3.66	
Eyepiece Diopter	-5~+5	
Wavelength	1535nm	
Max Measuring Range	Human/2300m Car/5000m	
Measuring Accuacy	±0.5m~±2m	
Positioning	GPS & BeiDou Dual Positioning	
Horizontal Positioning Accuracy	2.5m	
Digital Compass	Support	
Display	0.39" OLED 1024x768	
Digital Zoom	1x-4x	
NETD	≤ 25mk@300K	
Observation Mode	Binocular	
Eye Relief	30mm	
Operating Time	≥ 6h	
Waterproof	IP67	
Memory	64G	
Wi-Fi Transmission	Wi-Fi	
Power Source	Four 18650 Li-ion Batteries	
Interface	Type -C/HDMI	
Weight (Without Battery)	≤ 1025g	
Dimensions	229×190×82mm	
Operating Temperature	-25℃ ~+55℃	
Storage Temperature	-55℃ ~+70℃	



# THERMAL SCOPE

## LK SERIES



Shutterless



Real-time Denoising



Laser Ranging 1200m



Max Shock Resistance 2000g



Work Normally at -30°C



IP67

SERIES	LK-IR		LK-LR	
Model	LK-IR-E19 LK-IR-E25 LK-IR-E35 LK-IR-E50	LK-IR-Q35 LK-IR-Q55 LK-IR-Q75	LK-LR-E19 LK-LR-E25 LK-LR-E35 LK-LR-E50	LK-LR-Q35 LK-LR-Q55 LK-LR-Q75
Detector	Uncooled VOx Microbolometer			
Resolution/Pixel Pitch	384×288/12μm	640×512/12μm	384×288/12μm	640×512/12μm
Objective Lens	19/25/35/50mm	35/55/75mm	19/25/35/50mm	35/55/75mm
Field of View	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3°×4.0°	12.6°×10.1° 8.0°×6.4° / 5.9°×4.7°	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3°×4.0°	12.6°×10.1° 8.0°×6.4° / 5.9°×4.7°
Visual Magnification	1.83~7.32 / 2.41~9.63 3.37~13.48 / 4.82~19.26	1.98~7.9 3.1~12.42 / 4.23~16.93	1.83~7.32 / 2.41~9.63 3.37~13.48 / 4.82~19.26	1.98~7.9 3.1~12.42 / 4.23~16.93
Spectral Band	8~14μm			
Frame Rate	50Hz			
NETD	≤ 25mk@300K			
Display	0.39" OLED 1024x768			
Digital Zoom	1x、 2x、 4x			
Eyepiece Diopter	-5 ~ +5			
Eye Relief	45mm			
Laser Ranging	/		1200m	
Power Supply	Two 18650 Li-ion Batteries			
Operating Time	≥ 8h			
Weight (Without Battery)	≤570g (19/25/35mm) ≤620g (50mm)	≤570g (35mm) ≤635g (55mm) ≤720g (75mm)	≤670g (19/25/35mm) ≤720g (50mm)	≤670g (35mm) ≤735g (55mm) ≤820g (75mm)
Dimensions	221x83x66mm		221x83x100mm	
Interface	Type-C (optional external power supply)			
Operating Temperature	-30℃ ~+55℃			
Protection Rating	IP67			
Reliability	≥ 1200g Shock Resistance (19/25/35mm) ≥ 2000g Shock Resistance (50/55/75mm)			
Altitude	≥ 5000m			
Detection Range (Human)	19mm/1800m 25mm/2370m 35mm/3310m 50mm/4730m 55mm/5200m 75mm/7090m			
Detection Range (Vehicle)	19mm/2430m 25mm/3200m 35mm/4480m 50mm/6390m 55mm/7030m 75mm/9590m			



# THERMAL SCOPE

## Mini SERIES



Shutterless



Real-time Denoising



Portable With Ease



Work Normally at -30°C



Hot Track



IP67

SERIES	Mini	
Model	M-IR-E25 M-IR-E35	M-IR-Q35
Detector	Uncooled VOx Microbolometer	
Resolution/Pixel Pitch	384×288/12μm	640×512/12μm
Objective Lens (F1.0)	25mm / 35mm	35mm
Field of View	10.6°×7.9° / 7.5°×5.7°	12.6°×10.1°
Visual Magnification	2.41~9.63 / 3.37~13.48	1.98~7.9
Spectral Band	8~14μm	
Frame Rate	50Hz	
NETD	≤ 25mk@300K	
Display	0.39" OLED 1024x768	
Digital Zoom	1x、2x、4x	
Eyeiece Diopter	-5 ~ +5	
Eye Relief	45mm	
Measuring Distance	-	1200m
Power Supply	Two 16340 Li-ion Batteries	
Operating Time	≥ 2.5h	≥ 2h
Weight (Without Battery)	≤ 480g	
Dimensions	208x57x58mm (Including Eyepiece/Objective Covers)	
Interface	Type-C	
Operating Temperature	-30℃ ~+50℃	
Protection Rating	IP67	
Reliability	800g Shock Resistance	
Altitude	≥ 5000m	
Adaptability	All-weather	
Detection Range (Human)	19mm/1800m 25mm/2370m 35mm/3310m	
Detection Range (Vehicle)	19mm/2430m 25mm/3200m 35mm/4480m	

# THERMAL SCOPE

## Demon SERIES



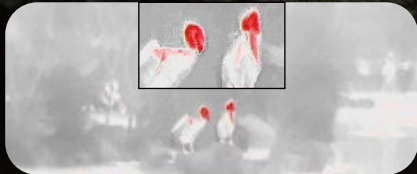
Small Size and Low Weight



Working Time up to 4h



Max Shock Resistance 800g



Picture in Picture



Hot Track



IP67

SERIES	Demon
Model	D-IR-Q19/D-IR-Q25/D-IR-Q35
Detector	Uncooled VOx Microbolometer
Resolution/Pixel Pitch	640×512/12μm
Objective Lens (F1.0)	19mm / 25mm / 35mm
Field of View	22.9° x18.4° / 17.5° x14° / 12.5° x10°
Magnification	1.1x~8.8x / 1.4x~11.6x / 2x~16x
Spectral Band	8~14μm
Frame Rate	50Hz
NETD	≤ 25mk @300k
Display	0.39" OLED 1024×768
Digital Zoom	1x、2x、4x、8x
Eyepiece Diopter	-5D ~ +5D
Eye Relief	45mm
Power Supply	Two 16340 Li-ion Rechargeable Batteries
Operating Time	≥ 4h
Weight (No Battery)	≤ 500g
Dimensions(Including Eyepiece/Objective Covers)	155x55x70mm / 160x55x70mm / 168x55x70mm
Interface	Type-C (Support External Power Supply)
Operation Temperature	-20℃ ~+55℃
Protection Rating	IP67
Reliability	800g/0.5ms Shock Resistance
Altitude	≥ 5000m
Adaptability	All-weather
Detection Range (Wolf)	19mm/1260m 25mm/1660m 35mm/2330m
Detection Range (Rabbit)	19mm/530m 25mm/690m 35mm/970m



# THERMAL SCOPE

## Tube SERIES



Shutterless



Real-time Denoising



Max Shock Resistance 1200g



Long Working Time up to 15h



Hot Track



IP67

SERIES	Tube	
Model	T-IR-Q35	T-IR-Q50
Detector	Uncooled VOx Microbolometer	
Resolution/Pixel Pitch	640×512/12μm	
Spectral Band	8~14μm	
NETD	≤ 25mk@300K	
Frame Rate	50Hz	
Objective Lens	35mm(F1.0)	50mm(F1.0)
Field of View	12.5° ×10°	8.7° ×7°
Visual Magnification	2~8x	3~12x
Digital Zoom	1~4x	
Eye Relief	50mm	
Eyepiece Diopter	-5 ~ +5	
Detection Range (Human)	3310m	4730m
Detection Range (Vehicle)	4480m	6390m
Display	0.39" OLED 1024*768	
Battery Type	Two 18650 Li-ion Batteries (Built-In) +One 18650 Li-ion Battery (External)	
Operating Time (22°C)	15h	
External Power Supply	5V(Type-C)	
Scope Tube Diameter	30mm	
Reliability	1200g Shock Resistance	
Protection Rating	IP67	
Memory Capacity	32GB	
Operation Temperature	-20°C ~+50°C	
Weight (Without Battery)	≤ 980g	
Dimensions	430×105×77mm	440×105×77mm
Accessory Package	Mounting Bracket, Eyecup, Lens Cap, Security Case	

# MULTI-PURPOSE THERMAL MONOCULAR

## ND-IR SERIES



Shutterless



Real-time Denoising



Small Size and Wight ≤ 250g



Handheld, Head-mounted  
Clip-on or Scope



Hot Track



IP67

SERIES	ND-IR			
Model	ND-IR-E16	ND-IR-E09	ND-IR-Q16	ND-IR-Q26
Detector	Uncooled VOx Microbolometer			
Resolution/Pixel Pitch	384×288/12μm		640×512/12μm	
Frame Rate,HZ	50Hz			
Shutterless	No Shutter Calibration			
Display	0.39" OLED 1024x768			
Objective Lens (F1.0)	16mm	9.6mm	16mm	26.7mm
Field of View	16.4°x12.3°	27°x20.4°	27°x21.7°	16.4°x13.1°
Visual Magnification	1~4			
Eyepiece Diopter	-6~+3	-5~+5	-5~+5	-6~+3
Eye Relief	25mm			
Output Wavelength/Power	650nm/2-5mW			
Spot Range	> 100m			
Spot Size	< 20mm			
Digital Zoom	1-4x			
Digital Compass	Azimuth / Pitch / Roll			
Wi-Fi	Support			
Video/Image Capture	Support			
Spectral Band	8~14μm			
NETD	≤ 25mk@300K			
Palettes	White Hot / Black Hot/ Iron Red / Deser Yellow Green Hot / Red Hot / Sky / Edge			
Use Method	Handheld, Head-mounted, Clip-On			
Weight	≤ 250g			
Dimensions	163x71x55mm ( Including Eyepiece/Objective Lens Caps )			
Power Supply	One 18650 Li-ion Battery			
Operating Time (Without WiFi)	≥ 4h			
Interface	Type-C (Power Supply/Serial Port/Analog Video Output)			
Mechanical Interface	2 x 1/4 Threaded holes, Piccatini Rail			
Operation Temperature	-20℃ ~50℃			
Protection Rating	IP67			
Reliability	800g Shock Resistance			
Adaptability	All-weather			
Recognition Range (Human)	370m	220m	370m	630m
Detection Range (Human)	1500m	900m	1500m	2500m
Accessory Kit	Helmet support, Carring Bag, User Manual, Cleaning Cloth, Picatinny rail(Optional)			



# NIGHT VISION

## ND-NV SERIES



Small Size and Low Weight



850nm IR Infrared  
Auxiliary Lighting



Auto Screen-off for  
Upward and Sideward Tilting



Strong Light Protection



Working Time up to 15h



IP67

SERIES	ND-NV
Model	ND-NV31
Objective Lens	26.8mm/F1.28
Field Of View	40°
Visual Magnification	1X
Focal Length Range	250mm~ ∞
Eyepiece Diopter	-5~+5
Eye Relief	25mm
Exit Pupil Diameter	14mm
LED Indicator (In The Field Of View)	Infrared auxiliary illumination/low battery indicator
Image Intensifier	GEN 2+(≥ 64lp/mm)
Image Tube Compatibility	MX10160 Contact、NNVT 3-Wire
Power Supply	Single AA Battery
Operating Time	15h(Binocular)/20h(Monocular)
IR (infrared) illuminator	850nm
High-light protection	Support
Flip-Up Screen Off	Support
Flip-Side Screen Off	Support
Indicator Light	Support
IPD Adjustment	56-72mm
Weight (NO Battery)	570g
Dimensions	100x85x113mm
Operation Temperature	-40℃~+50℃
Protection Rating	IP65
Interface	L4G24
Ultimate Resolution	64
Signal-to-Noise Ratio	28
Phosphor	P43 (Green Phosphor)/P45 (White Phosphor)



# NIGHT VISION

## ND-NV SERIES



SERIES	ND-NV
Model	ND-NV14
Focal length	26.8mm/ F1.28
Viewing angle	40°
Visual magnification	1x
Focus range	250mm~ ∞
Eyeiece visual acuity	-5~+5
Exit pupil distance	25mm
Exit Pupil	14mm
LED indicator	nfrared auxiliary lighting/flip up screen/ strong light protection/low battery warning
Image intensifier	GEN 2+ (≥ 64lp/mm)
Like tube compatibility	MX10160 contact, NNVT 3-wire
Power supply	1 AA battery
Operating Time	20h

# LASER RANGE FINDER

## Valiant SERIES



SERIES	Valiant
Magnification	6x
Objective Lens	20mm
Max Reflective Range	914 m
Tree Range	731 m
Deer Range	457 m
Minimum Range	4.5m
Accuracy	±1m @100m

SERIES	Valiant
Maximum Angle Reading	± 60°
Field of View	114m/1000m ( 6.5°)
Eye Relief	15mm
Battery Type	CR2
Battery Life	~5000 Range Cycles
Dimensions	96x74.6x35mm
Weight w/ Battery	156g



# LASER RANGFINDER

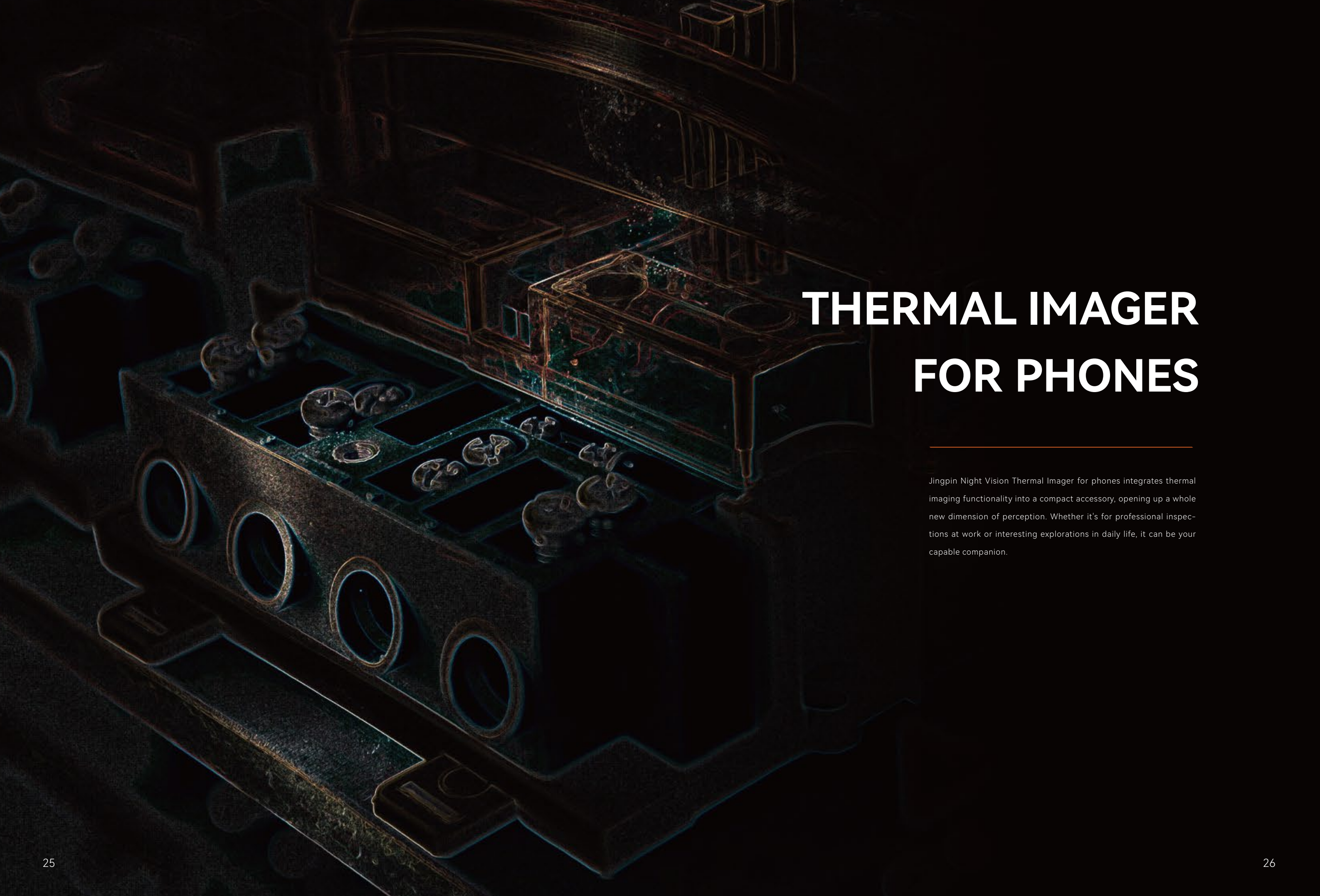
## Heroic Series



SERIES	Heroic
Measure Range	Effective : 5-2286m
	Non Reflective : 2286m
	Reflective : 1828m
	Deer/Game : 1189m
Magnification	10x
Deer Range	5m - 2286m
Accuracy	±1m (<300m); ±2m (300m - 1500m)
Angle Range	±60°
Display Type	Red OLED

SERIES	Heroic	
FOV	m@1000m	102
	Angular	5.8°
Exit Pupil		4.2mm
Eye Relief		14mm
Min. Focus Distance		6m
Ocular Adjustment		±5
Battery		CR2
Weight		705g
Dimensions		160.8x136.8x63mm





# THERMAL IMAGER FOR PHONES

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Jingpin Night Vision Thermal Imager for phones integrates thermal imaging functionality into a compact accessory, opening up a whole new dimension of perception. Whether it's for professional inspections at work or interesting explorations in daily life, it can be your capable companion.



# THERMAL IMAGER FOR PHONES

## Petite Series



Portable and compact



Plug-and-play



Applicable to multiple scenarios



Multiple pseudo-colors



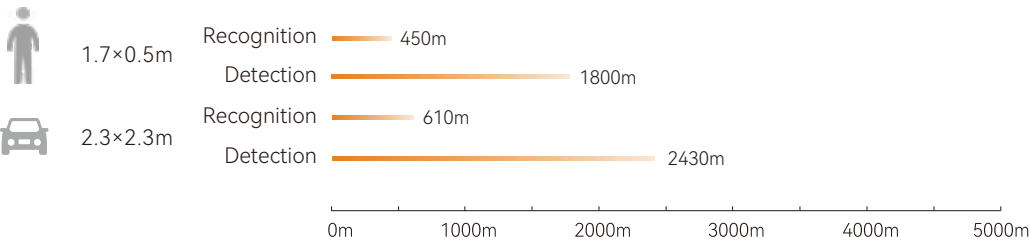
Hotspot tracking

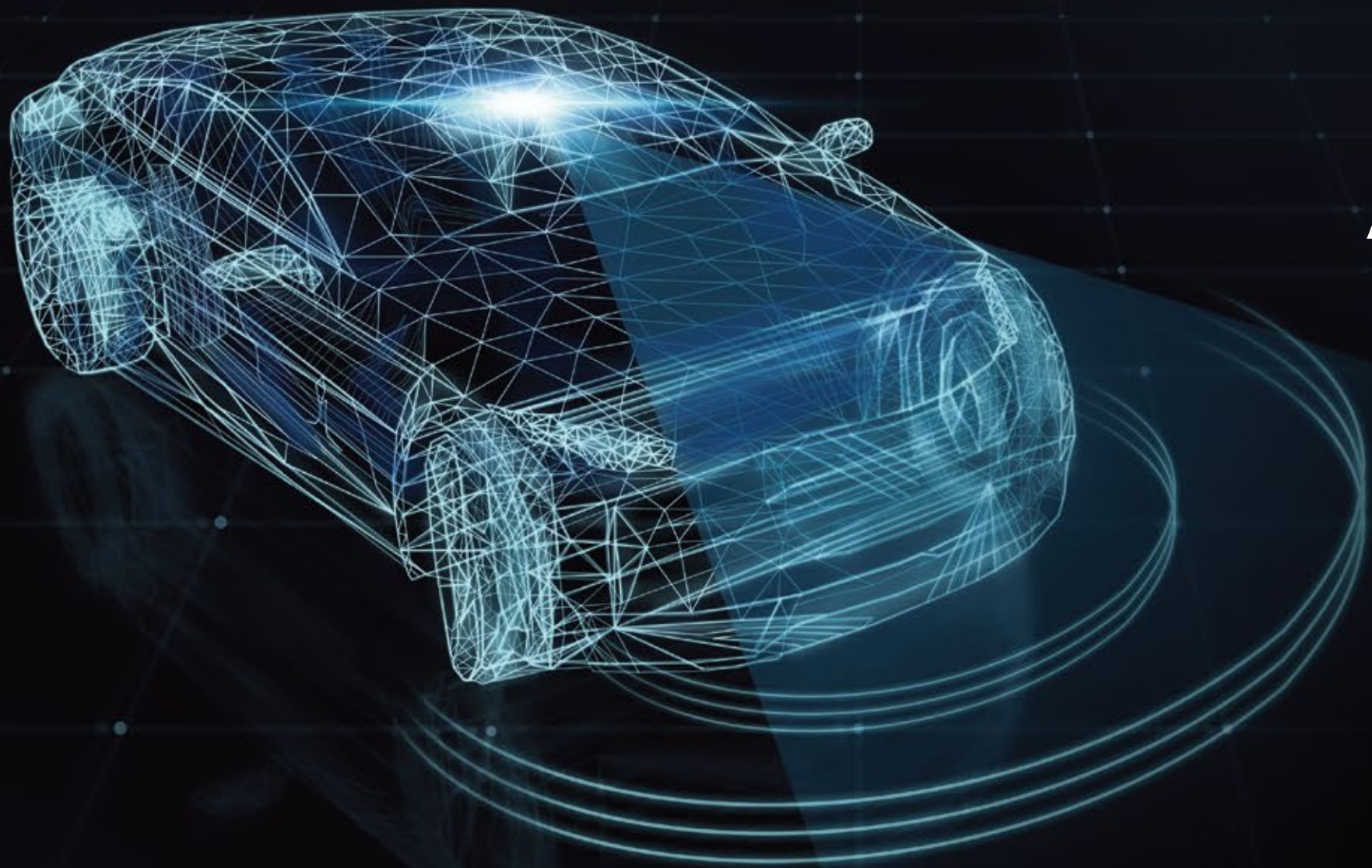


Supports Android 7.0 and above

SERIES	PETITE
Product Categories	PT-Q19
Resolution	640×512
PixelsSize	12μm
Field of View	22.74°×18.26°
Frame Rate,HZ	25Hz
NETD	≤50mk@25℃,F1.0
MRTD	≤400mk@25℃,F1.0
Operation Temperature	-20℃ ~ +50℃
Power Wastage	<1W
Weight	< 53g
Dimension	27.5×27.5×46mm
Support System	Android 7.0 and above
Image Enhancement	Digital detail enhancement
Image Correction	Manual
Pseudo-color	Whitehot / Blackhot / Rainbow/ Iron / Red Hot
Secondary Development	Provide SDK development kit
Reticle	Support
Hot Tracking	Support
Video Saving	Support photo taking and video recording functions
Software Update	Support online software update function

### Operating distance





# ASSISTED DRIVING

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In the era of rapid development of intelligent driving, assisted driving technology has become the key to improving driving safety and driving experience. As outstanding representatives among them, thermal imaging vehicle-mounted night vision systems and vehicle-mounted LiDAR are playing an irreplaceable and important role.



# VEHICLE GRADE LIDAR

## CS192 Series



Automotive-grade standard



140°×20° wide field of view



250m detection capability



192 lines of vertical equivalent resolution  
1400 lines of horizontal equivalent resolution

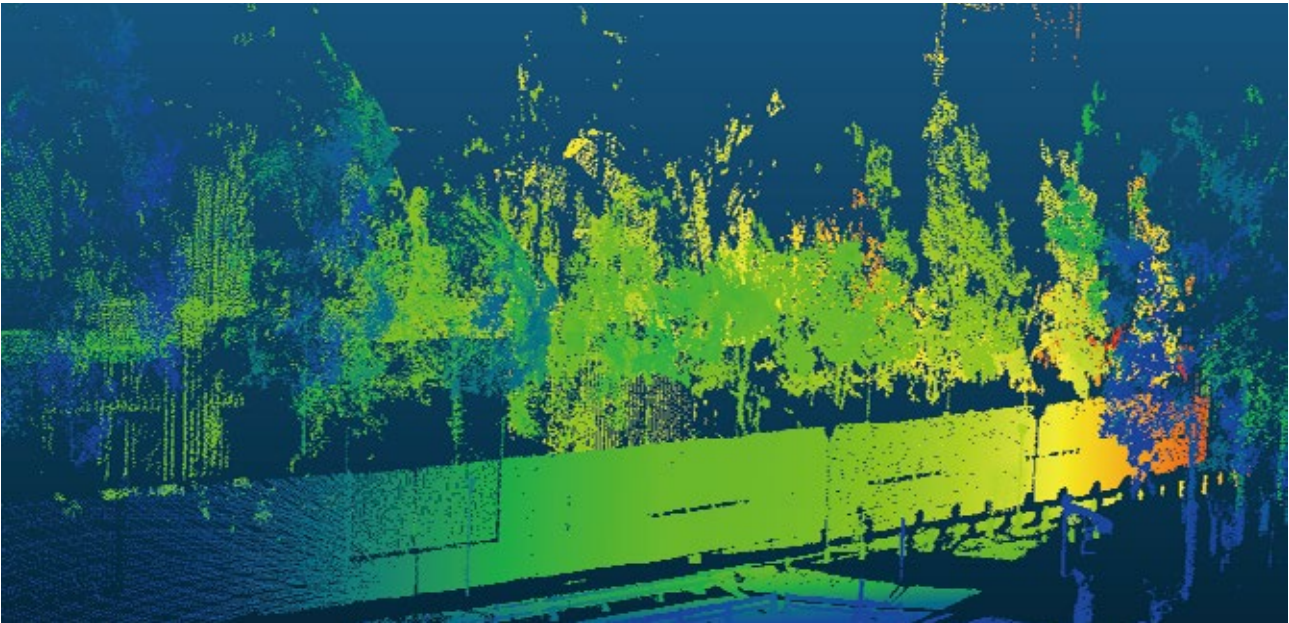


Strong environmental adaptability



High reliability and durability

SERIES	CS192
Wavelength	905nm
Detection Rang	180m @10%target / 250m @ maximum
Vertical Equivalent Beam	192 lines
Horizontal Beam	1400 lines
FOV	Horizontal: 140° Vertical: 20°
Resolution	0.1(H) x 0.1(V)
Laser Divergence Angle	1.3mrad
Frame Rate	10Hz/20Hz
Points/Sec	2.6Million Points @10Hz
Supply Voltage	9~36Vdc
Power Consumption	10W
Interface	Gigabit Ethernet Port
Protection Rating	IP69K / IPX9K
Dimensions	140 x 110 x 42mm
Work Temperature Range	-40℃ ~125℃



# INTELLIGENT IN-VEHICLE AI SYSTEM

## IVS Series

### (5.5-INCH SCREEN)



All-weather perception



Ultra-long-range night vision



HD image quality



Intelligent early warning



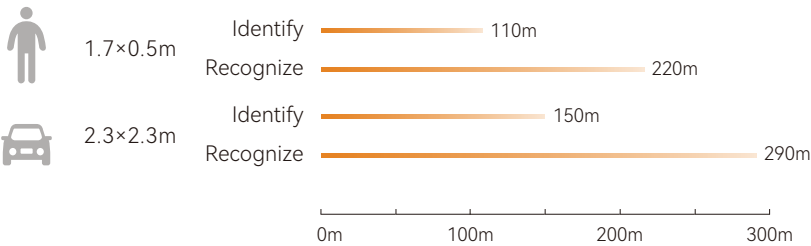
Multi-purpose device



Human-machine interaction

SERIES	IVS
Product Name	Intelligent In-Vehicle AI System
Product Model	IVS05-Q09
Type	Uncooled VOx Microbolometer
Resolution, pixels	640×512/12μm
Spectral Band	8~14μm
Frame Rate,Hz	25Hz
Objective Lens	9mm/6.6mm
Field of View	H40°/H39°
Recognition Range (Human1.7m)	200m/150m
Recognition Range (Car2m)	200m/200m
Display	5.5"LCD 1080*2160
Interface	GMSL/FAKRA/Type-C
Wi-Fi Transmission	Wi-Fi
External Power Supply	Type-C (5V 3A) / 5000mAh
Power Wastage	≤ 15W
Protection Rating	IP67(Thermal Camera)
Operation Temperature	-20 ℃ ~+80 ℃
Weight	≤ 600g
Dimensions	170*88*19mm
Defrosting function	Supports
Intelligent recognition	Supports
Camera protection window	Front of vehicle installation (9mm) or Roof installation (6.6mm)

#### 作用距离





# INTELLIGENT IN-VEHICLE AI SYSTEM

## IVS Series

### (4-INCH SCREEN)



4G module reserved



Ultra-long-range night vision



HD image quality



Intelligent early warning



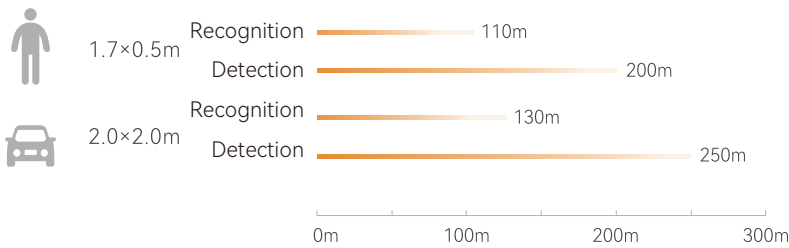
Multi-purpose device



Human-machine interaction

SERIES	IVS
Product Name	Intelligent In-Vehicle AI System
Product Model	IVS4G-Q09(06)
Detector Parameters	
Type	Uncooled VOx Microbolometer
Resolution, pixels	640×512/12μm
Spectral Band	8~14μm
Frame Rate,Hz	25Hz
Optical Parameters	
Objective Lens	9mm/6.6mm
Field of View	H40°/H39°
Recognition Range (Human 1.7m)	200m/150m
Recognition Range (Car 2m)	250m/200m
Device Information	
Display	4"LCD 720*720
Interface	GMSL/FAKRA/Type-C
Wi-Fi Transmission	Wi-Fi
External Power Supply	Type-C (5V 3A)
Power Wastage	≤15W
Protection Rating	IP67(Thermal Camera)
Operation Temperature	-20 °C~+60 °C
Host Weight	≤400g
Dimensions	96*92*18mm
Smart recognition	Supports
Thermal camera installation options (choose one)	Front of vehicle installation (9mm) or Roof installation (6.6mm)

#### Operating distance



Vehicle-mounted



Cycling / Riding

# INTELLIGENT IN-VEHICLE AI SYSTEM

## IVS Series

### (10-INCH SCREEN)



4G module reserved



Ultra-long-range night vision



HD image quality



Intelligent early warning



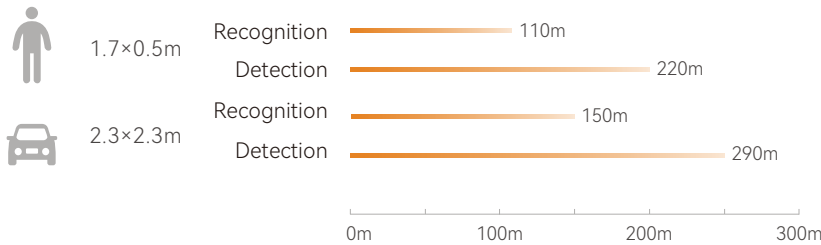
Multi-purpose device



Human-machine interaction

SERIES	IVS
Product Name	Intelligent In-Vehicle AI System
Product Model	IVS10G-Q09(06)
Detector Parameters	
Type	Uncooled VOx Microbolometer
Resolution, pixels	640×512/12μm
Spectral Band	8~14μm
Frame Rate,HZ	25Hz
Optical Parameters	
Objective Lens	9mm/6.6mm
Field of View	H40°/H39°
Recognition Range (Human 1.7m)	200m/150m
Recognition Range (Car 2m)	250m/200m
Device Information	
Display	10"LCD 1280*800
Interface	GMSL/FAKRA/Type-C
Wi-Fi Transmission	Wi-Fi
External Power Supply	Type-C (5V 3A)
Power Wastage	≤15W
Protection Rating	IP67(Thermal Camera)
Operation Temperature	-20 °C~+60 °C
Host Weight	≤820g
Dimensions	252*245*30mm
Smart recognition	Supports
Thermal camera installation options (choose one)	Front of vehicle installation (9mm) or Roof installation (6.6mm)

#### Operating distance





A full-page background image showing a white lighthouse with a black lantern room, situated on a dark, rocky cliff. To the left of the lighthouse is a white, two-story keeper's house with a dark roof. The sea is visible in the background under a dramatic, cloudy sky at dusk or dawn. The overall color palette is dominated by blues, greys, and the white of the lighthouse.

# INFRARED PANORAMIC RADAR

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As an innovative product integrating advanced technology, Jingpin Night Vision Infrared Panoramic System is providing efficient and reliable security protection for various industries with its excellent performance. It features a 360° dead-angle-free panoramic view, capable of simultaneously tracking the trajectories of multiple targets and quickly locking the positions and movements of moving objects such as people and vehicles.



# INFRARED PANORAMIC RADAR

## ESSD Series



360° panoramic view



Multi-target trajectory



Plug-and-play



All-time



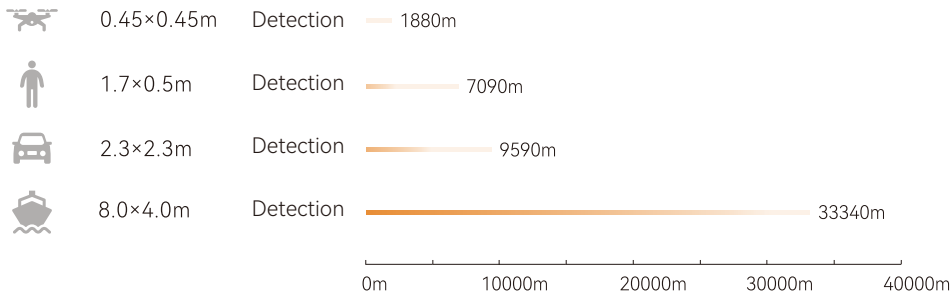
HD image quality



High reliability

SERIES	ESSD
Model	ES-IR-Q75
Type	Uncooled VOx Microbolometer
Resolution, pixels	640×512
Spectral Band	8~14μm
Objective Lens	75mm
Panoramic Image Resolution	39200×512
Horizontal field of view	360°
Elevation Field of View	5.9°
Pitch Angle Adjustment Range	-35°~+20°
Detection Range(UAV)	1880m
Detection Range (Human)	7090m
Detection Range(car)	9590m
Detection Range(boat)	33340m
Electricity Supply	DC24V
Average Power Consumption	<50W
Image Data Output Interface	RJ45 Network Port
Protection Rating	IP67
Operation Temperature	-20℃~+70℃
Weight	<13Kg
Dimensions	395x340x402mm
Usage Scenarios	Factories, Ports, Key Sites, Airports, Border Security

### Operating distance





# INFRARED PANORAMIC RADAR

## ESPT Series



360° panoramic view



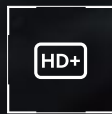
Multi-target trajectory



Plug-and-play



All-time



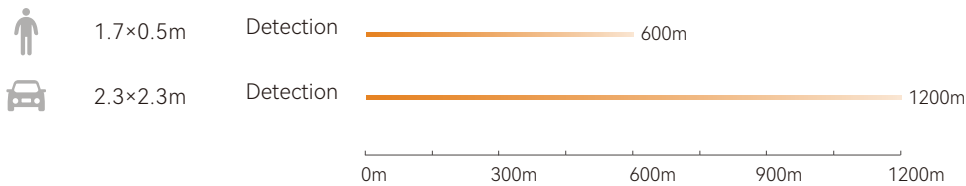
HD image quality

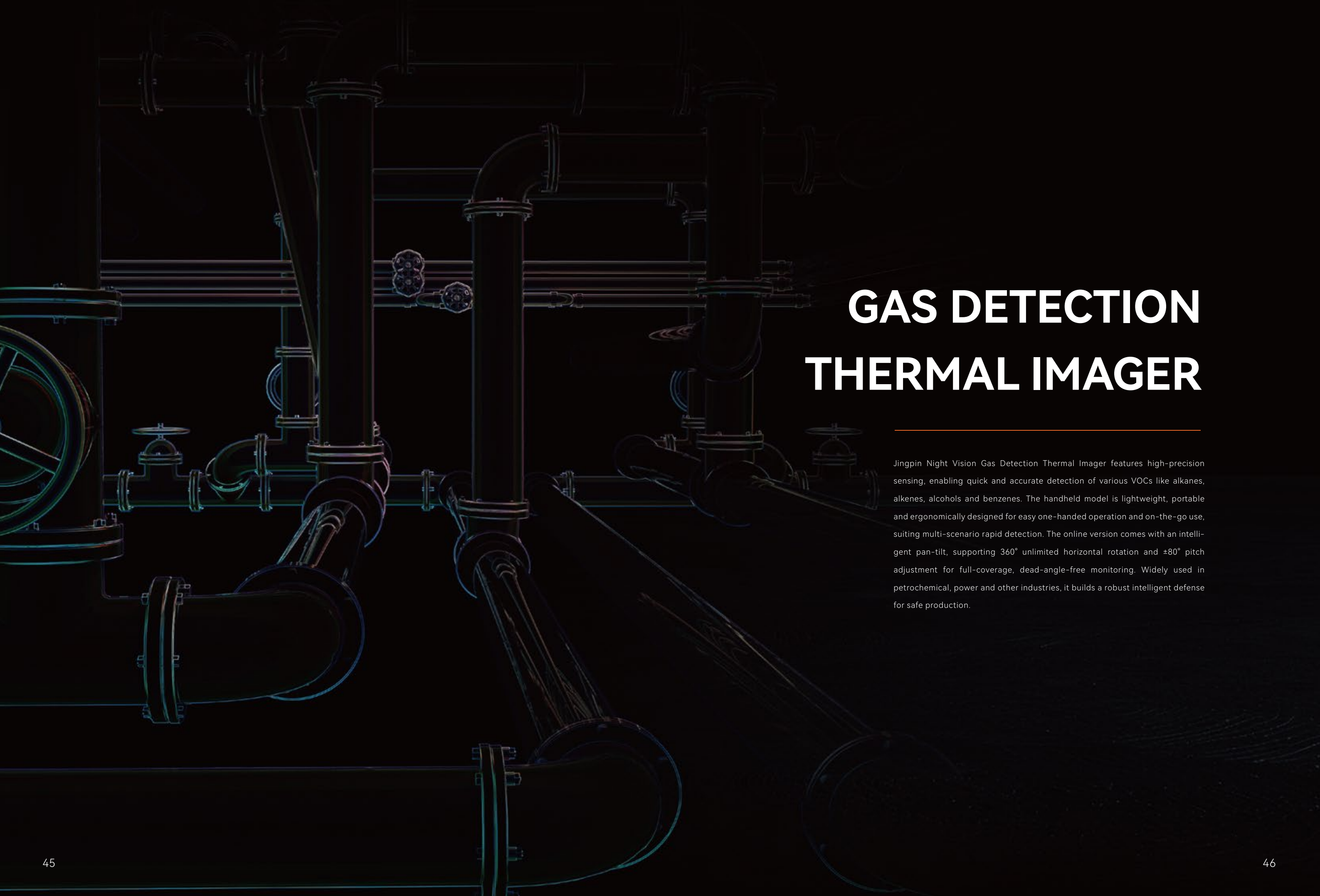


High reliability

SERIES	ESPT
Model	ESPT-Q19
Type	Uncooled VOx Microbolometer
Resolution, pixels	640×512
Spectral Band	8~14μm
Objective Lens	19mm
Panoramic Image Resolution	5 million 100 thousand
Horizontal Field of View	360°
Vertical Field of View	18.4°
Scan Frequency	0.5Hz
180° Sector Scan Rate	1Hz
Detection Range (Human)	600m
Detection Range (Car)	1200m
Electricity Supply	DC24V/POE
Average Power Consumption	<30W
Image Data Output Interface	RJ45 Network Port
Wireless Interface	4G
Audio Interface	AUDIO
Protection Rating	IP66
Operation Temperature	-20℃~60℃
Weight	≤2.2Kg
Dimensions	122x122x166mm

### Operating distance





# GAS DETECTION THERMAL IMAGER

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Jingpin Night Vision Gas Detection Thermal Imager features high-precision sensing, enabling quick and accurate detection of various VOCs like alkanes, alkenes, alcohols and benzenes. The handheld model is lightweight, portable and ergonomically designed for easy one-handed operation and on-the-go use, suiting multi-scenario rapid detection. The online version comes with an intelligent pan-tilt, supporting 360° unlimited horizontal rotation and  $\pm 80^\circ$  pitch adjustment for full-coverage, dead-angle-free monitoring. Widely used in petrochemical, power and other industries, it builds a robust intelligent defense for safe production.



# GAS DETECTION THERMAL IMAGER

## HGD Handheld Type



Lightweight and easy to carry



Automatic focusing



The body design refers to GJB150A



Optical axis consistency  $\leq 2\text{mil}$ ,  
with excellent image fusion effect



Low image delay



Core components are independently designed

FUNCTION	TYPE	PARAMETER	INDEX
Visible Light	Detector parameters	Detector	CMOS
		Resolution	2594 x 1944
		Pixel Size	2.0 $\mu\text{m}$
		Frame Rate	30Hz
	Optical parameters	Aperture (F)	F2.5
		Focal Length	3.5~9mm
		FOV	Diagonal 93°(W)~39.4°(T)
			Horizontal 83°(W)~32°(T)
			Vertical 51°(W)~20°(T)
		Focusing Type	Manual/Automatic
Infrared	Detector parameters	Photosensitive materials	InAsSb
		Resolution	640 x 512
		Pixel Size	15 $\mu\text{m}$
		Spectral Band	3.2 $\mu\text{m}$ ~3.4 $\mu\text{m}$
		NETD	$\leq 25\text{mK}$
	Optical parameters	Frame Rate	25/30Hz
		Aperture (F)	F1.2
		Focal Length	25mm
Display		FOV	22.3°× 17.7°
		Focusing Type	Manual/Automatic
		Display Screen	5 inch LCD, Resolution1920×1080, rotatable
Temperature Measurement		Viewfinder (eyepiece)	0.39inch OLED, Resolution1024×768, rotatable
		Display Interface	HDMI
		Range	-20°C~350°C
system	key communication	Mode	SUPPORT POINT/REGIONAL TEMPERATURE MEASUREMENT, AUTOMATICALLY TRACK THE HIGHEST TEMPERATURE POINT, SET THE HIGHEST AND LOWEST TEMPERATURE, ISOTHERM, TEMPERATURE DIFFERENCE, SUPPORT TEMPERATURE ALARM
		Accuracy	$\pm 1^{\circ}\text{C}$ (0~100°C) $\pm 2\%$ Range (-20~0°C or > 100°C)
		power switch	Equipment power switch control
Others		USB	TYPE-C
		Fill Light	White Light Fill Light
		Laser Indicator	II Class, 1mW/635nm Red
		GPS	Support
		Memory	Internal 32GB
		Battery	Rechargeble Li-ion
		Operating Time	$\geq 2\text{h}$
Dimension	complete machine	Fixing Method	Support tripod fixation
Weight	complete machine	Dimension	374 x 159 x 180.8mm
Gas leak detection	Detection Type	Weight	$\leq 2050\text{g}$
		Detectable gas types	METHANE, ETHANE, PROPANE, BUTANE, PENTANE, HEXANE, HEPTANE, OCTANE, ETHYLENE OXIDE, PROPYLENE OXIDE, ETHYLENE, PROPYLENE, 1-BUTENE, METHANOL, ETHANOL, BUTANOL, ETHYLENE GLYCOL, ISOPROPANOL, ETHER, PROPIONALDEHYDE, BENZENE, TOLUENE, ETHYLBENZENE, ANILINE, ETC.

# GAS DETECTION THERMAL IMAGER

## NGD Online Type



360° Horizontally and ±80° in pitch



Automatic focusing



Body design refers to GJB150A



7×24h Real-time  
online monitoring



Low image delay and  
long-distance detection



Core components are  
independently designed

FUNCTION	TYPE	PARAMETER	INDEX
Visible Light	Camera parameters	Detector	CMOS
		Electronic shutter	Automatic (1/25 Second to 1/100000 second)
		Auto Iris	DC+HALL driver
		Resolution	2688 x 1520
		Frame Rate	25Hz
	Optical parameters	Aperture (F)	F1.61~ F5.19
		Focal Length	6.6~264mm (Maximum 40x optical zoom)
		Zoom	4 Seconds (Optical, wide-angle~telephoto)
		Close-up distance	100mm~1500mm (wide-angle~telephoto)
		Horizontal field of view angle	57.62 °~2.95 ° (wide-angle~telephoto)
Infrared	Detector parameters	Light-Sensitive Material	InAsSb
		Resolution	320 x 256640 x 512
		Pixel Size	30μm15μm
		Spectral Band	3.2μm ~ 3.5μm
		NETD	≤ 15mk≤ 25mk
		Frame Rate	25Hz
		Cooling time	≤3.5min @ 23℃
		Cooling power consumption	≤ 19W @ 23 °C (peak)、≤ 9W @ 23 °C (stable)
	Optical parameters	Aperture (F)	F1.2
		Focal Length	30mm~ 90mm
		FOV	18°~ 6°
Interface	Video interface	Network	100M Ethernet
		Interface type	Aviation plug
	Control interface	PTZ control interface	RS485 or 100Mbps Ethernet port
	Power interface	Supply Voltage	DC_36V
		Overall Power Consumption	Power consumption (25 °C/24V)≤ 180W
		Start Time	≤ 7min
Dimension and Weight	General status	Service life	> 5 years
		operation temperature	-20℃ ~55℃
		storage temperature	-25℃ ~60℃
		Working humidity	0~99%
		Protection grade	IP66
		Battery certification	CE/FCC
Dimensions		Size	450 x 450 x 500mm
Others		Fill Light	Support visible light supplementary lighting



# LONG-WAVE UNCOOLED THERMAL CAMERA CORE

The logo is centered within a glowing blue square frame. The background of the entire page is a dark blue circuit board pattern with various lines, circles, and small glowing points.

IRVOTEX

The core components of Jingpin Night Vision's long-wave uncooled imaging module, including the lens, detector, and structure, are all independently developed. It adopts a highly reliable infrared detector and has excellent shock resistance and impact prevention capabilities. Jingpin Night Vision's uncooled core is small in size and low in power consumption. It supports customization of multiple interfaces and offers optional infrared lenses of various specifications. It is widely used in fields such as vehicle-mounted night vision security monitoring, outdoor sports, fire rescue, and law enforcement search and rescue.

# LONG-WAVE UNCOOLED THERMAL CAMERA CORE

## Fireye Series



High sensitivity



Small size



Low power consumption



Compatible with multiple interfaces



Customization services



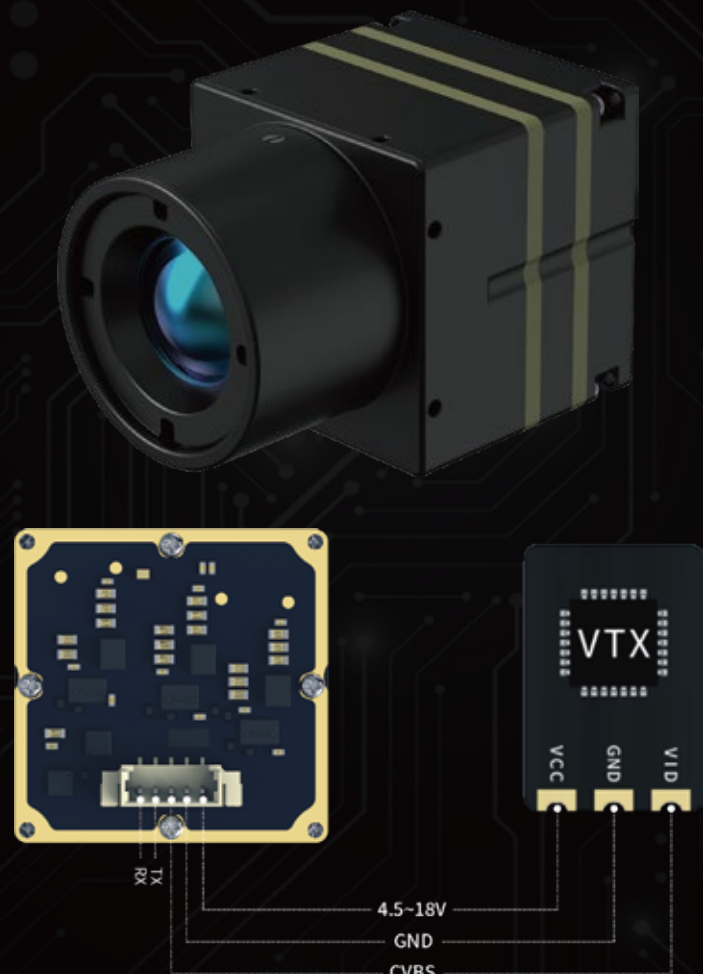
High frame rate

SERIES	Fireye	
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1-8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron Red/ Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement	
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection	
Power Input	DC 3.8 ~ 5.5V	
Power Consumption	≤ 1W	
Vibratory	6.06g, Random Vibration, All Axial Directions	
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Humidness	5 ~ 95%, Non-condensing	
Operation Temperature	-20°C~+55°C	
Storage Temperature	-55°C~+70°C	
Objective Lens	9.1/13/19/25/35/50mm, F1.0	
Focusing Method	Manual	
Field of View	28.9° × 21.62° (9.1mm) 20.1° × 15.14° (13mm) 13.83° × 10.39° (19mm) 10.53° × 7.91° (25mm) 7.53° × 5.65° (35mm) 5.28° × 3.96° (50mm)	49.1° × 38.74° (9.1mm) 32.91° × 26.59° (13mm) 22.85° × 18.37° (19mm) 17.46° × 14.01° (25mm) 12.52° × 10.03° (35mm) 8.78° × 7.03° (50mm)
Analog Video	CVBS	
Digital Video	BT.656/LVDS/MIPI/Cameralink/SDI/ETH (Selectable)	
Communication Interface	UART/I2C	
Weight	Shutter ≤ 22.3g / Shutterless ≤ 20g (Lens Free)	
Dimensions	25mm X 25mm X 19mm (Lens Free)	



# LONG-WAVE UNCOOLED THERMAL CAMERA CORE

## Fireeye V2 Series



High sensitivity



Small size



Low power consumption



Compatible with multiple interfaces



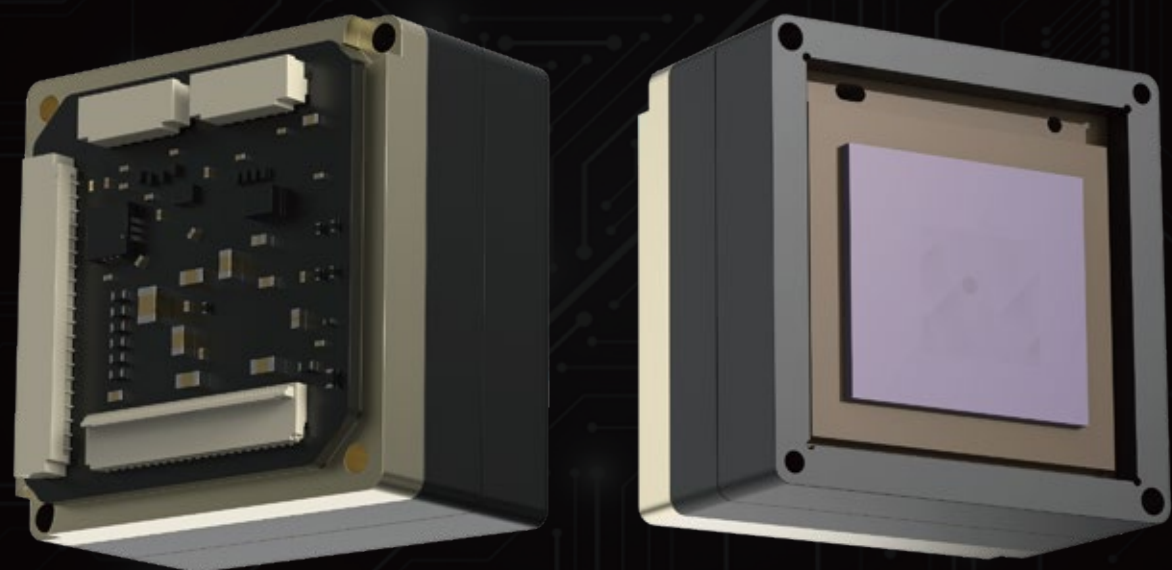
Customization services



High frame rate

SERIES	Fireeye V2	
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1-8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron Red/ Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement	
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection	
Power Input	DC 3.8 ~ 5.5V	
Power Consumption	≤ 1W	
Vibratory	6.06g, Random Vibration, All Axial Directions	
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Humidness	5 ~ 95%, Non-condensing	
Operation Temperature	-20°C~+55°C	
Storage Temperature	-55°C~+70°C	
Objective Lens	9.1mm, F1.0	
Focusing Method	Manual	
Field of View	28.9° × 21.62° (9.1mm)	49.1° × 38.74° (9.1mm)
Analog Video	CVBS	
Communication Interface	UART	
Weight	≤ 40g±2g (With Lens)	
Dimensions	25mm X 25mm X 42mm (With Lens)	

LONG-WAVE UNCOOLED  
THERMAL CAMERA CORE  
Fireye A Series



High sensitivity



Small size



Low power consumption



Compatible with multiple interfaces



Customization services



High frame rate

SERIES	Fireye A	
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD@25°C	≤ 50mk@300K	
Frame Frequency	≤ 50Hz	
Spectral band	8 ~ 14μm	
Analog Video	PAL or NTSC	
Interface Board	BT656 (20P 0.5mm pitch FPC or 27P 0.3mm pitch FPC selectable)	
Digital Video	BT656 Line by Line Output	
Communication Interface	UART (TTL 3.3V)	
DC Voltage Range	4.5V ~ 18V	
Typical Voltage DC	12V	
Typical Power@25°C	≤0.9W (PAL On)	≤0.72W (PAL Off)
Image Correction	Shutter/Shutterless(Selectable)	
Lightness Contrast	Manual / Auto	
Gain Control	Manual / Semi-Auto / Auto	
Polarity	Whitehot / Blackhot / Red Hot / Pseudocolor / Sky / Edge Conversion	
Image Enhancement	On / Off	
Image Denoising	Digital Filtering Denoising	
Reticle	Display / Hide / Move	
Vibratory	600g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Operation Temperature	-40°C ~+60°C	
Storage Temperature	-50°C ~+70°C	
Humidity	5%~95%, Non-condensing	
Weight	≤21g (Without Lens)	
Dimensions	26.5 × 26.5 × 17.56mm (Without Lens)	



LONG-WAVE UNCOOLED  
THERMAL CAMERA CORE

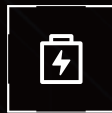
Spiritpupil Series



High sensitivity



Small size



Low power consumption



Compatible with multiple interfaces



Customization services

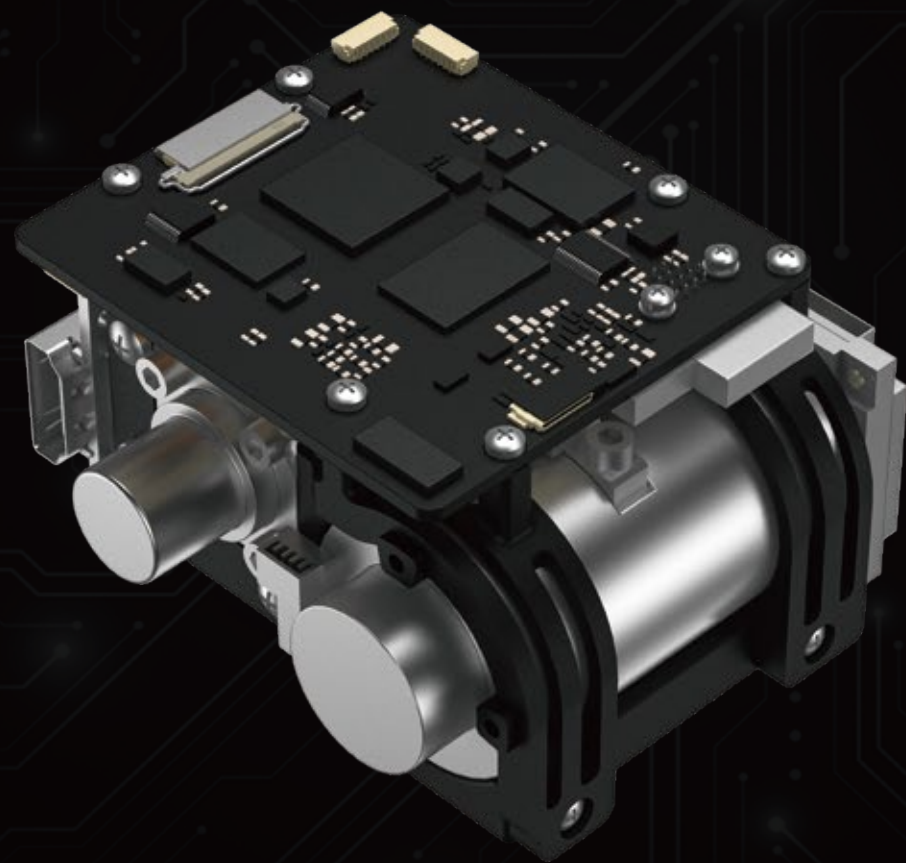


High frame rate

SERIES	SPIRITPUPIL
Type	Uncooled VOx Microbolometer
Resolution	640×512
PixelsSize	12μm
NETD	≤ 50mk, @F1.0, 300K
Frame Frequency	≤ 50Hz
Spectral Band	8 ~ 14μm
Image Correction	Shutter/Shutterless (Selectable)
Brightness Contrast Adjustment	Auto/Manual
Digital Zoom	1-8x
Reticle	Show/Hide/Move
Pseudo-color	Whitehot / Blackhot / Iron Red/ Rainbow
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement, Histogram Stretching
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection
Power Input	DC 3.8 ~ 5.5V
Power Consumption	≤600mW, @5V, 25°C
Vibratory	6.06g, Random Vibration, All Axial Directions
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions
Humidness	5 ~ 95%, Non-condensing
Operation Temperature	-20°C~+55°C
Storage Temperature	-55°C~+70°C
Objective Lens	9.1/13/19/25/35/50mm, F1.0
Focusing Method	Manual
Field of View	49.1° × 38.74 (° 9.1mm) 32.91° × 26.59 (° 13mm) 22.85° × 18.37° (19mm) 17.46° × 14.01 (° 25mm) 12.52° × 10.03
Analog Video	CVBS
Digital Video	BT.656/BT.1120/LVDS/MIPI
Communication Interface	UART
Weight	≤ 10g (Lens Free)
Dimensions	21mm X 21mm X 9mm (Lens Free)

# MID-WAVE COOLED THERMAL CAMERA CORE

HT Series HOT Miniaturized Thermal Camera Core



High sensitivity



Small size



Low power consumption



Compatible with multiple interfaces



Customization services



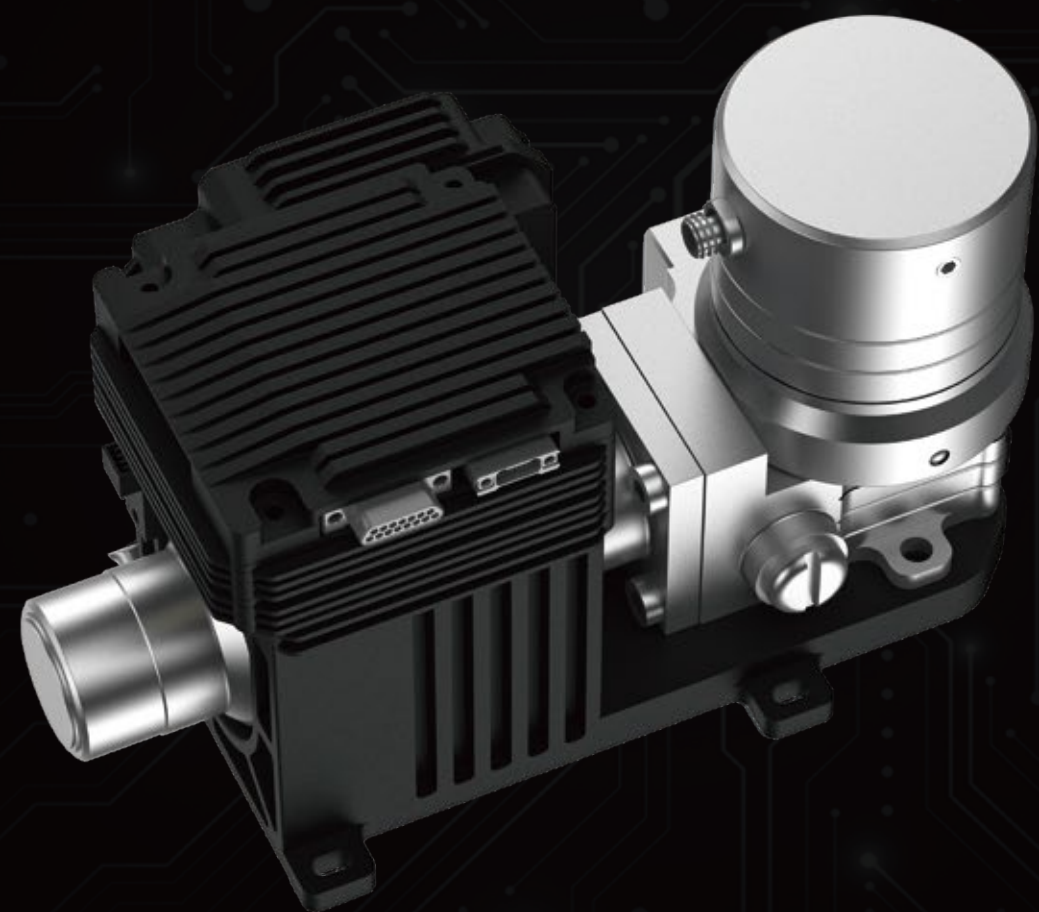
High frame rate

SERIES	HTE30	HTQ15
Type	T2SL	
Resolution	320*256	640*512
PixelsSize	30μm	15μm
Spectral Band	3.7um~4.8um	
Aperture	F2/F4/F5.5	
NETD@F4	<20mk	
Frame Frequency	25Hz/30Hz/50Hz	
Brightness Adjustment	Manual	
Contrast Adjustment	Manual	
Black and white hot switching	Support (default white hot)	
Black and white hot switching	1/2/4/8	
Image Processing	Non-uniformity Correction/ Bad Pixel Detection and Correction/Digital Filtering for Noise Reduction / Contrast Stretching/ Digital Detail Enhancement/Brightness Adjustment/ Image Compression	
Image mirroring	Horizontal/Vertical/Diagonal	
Dimensions	69×67×44mm	
Weight	<340g	
Power Supply	DC12V±1V	
Power Consumption	Initial Power:≤18W@23°C Stable Power:≤8W@23°C	
Analog Interface	PAL	
Digital Interface	Cameralink/SDI/CML/BT1120/HDMI/RJ45/USB/MIPI	
Communication Interface	RS422; Baud rate configurable system; Default 115200bps	
Operation Temperature	-40°C ~+60°C	
Storage Temperature	-45°C ~+65°C	
Random Vibration	5.98g	
Shock Resistance	50g/11ms, Half sine wave, in the X, Y, and Z axis directions	
Reliability	MTTF@63 2% ≥ 20000h	



# MID-WAVE COOLED THERMAL CAMERA CORE

SM Series Scorpio Cooled Thermal Camera Core



High sensitivity



Small size



Low power consumption



Compatible with multiple interfaces



Customization services



High frame rate

SERIES	SMQ15-R
Type	MCT
Resolution	640*512
PixelsSize	15μm
Spectral Band	3.7um~4.8um
Aperture	F4/F5.5
NETD@F4	<20mk
Frame Frequency	25Hz/30Hz/50Hz
Brightness Adjustment	Manual
Contrast Adjustment	Manual
Black and white hot switching	Support (default white hot)
Black and white hot switching	1/2/4/8
Image Processing	Non-uniformity Correction/ Bad Pixel Detection and Correction/Digital Filtering for Noise Reduction / Contrast Stretching/ Digital Detail Enhancement/Brightness Adjustment/ Image Compression
Image mirroring	Horizontal/Vertical/Diagonal
Dimensions	144mmX80mmX79mm
Weight	<820g
Power Supply	DC24V±1V
Power Consumption	Startup power consumption: ≤ 16W@23 Stable power consumption at °C: ≤ 13W@23 °C
Analog Video	PAL
Digital Video	Cameralink/SDI/CML/BT1120/HDMI/RJ45/USB/MIPI
Communication Interface	RS422; Baud rate configurable system; Default 115200bps
Operation Temperature	-40°C ~+60°C
Storage Temperature	-45°C ~+65°C
Random Vibration	5.98g
Shock Resistance	50g/11ms, Half sine wave, once in each of the X, Y, Z axes, three axes, and six directions
Reliability	MTTF@63 2% ≥8000h